IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A compound of the general formula (I) or a salt or a physiologically functional derivative thereof:

$$(R^{1})_{t}$$

$$R^{2}$$

$$R^{8}$$

$$(R^{9})_{v}$$

$$R^{2}$$

$$R^{2}$$

$$R^{2}$$

$$R^{3}$$

$$R^{2}$$

$$R^{3}$$

$$R^{2}$$

$$R^{3}$$

$$R^{2}$$

$$R^{3}$$

$$R^{2}$$

$$R^{3}$$

$$R^{3}$$

$$R^{4}$$

$$R^{5}$$

$$R^{5}$$

$$R^{7}$$

$$R^{8}$$

$$R^{9}$$

wherein

A is a <u>non-heterocyclic</u> non-aromatic ring system containing 4 to 8 carbon atoms, wherein the ring system comprises at least one double bond and wherein one or more of the carbon atoms in the ring <u>represented by X may optionally be carbonyl (C=O)</u> can be replaced by a group X, wherein X is CO;

D is O, S, SO_2 , NR^4 or CH_2 ;

Z¹ and Z² are, independently, O, S, or NR⁵;

R¹ is independently -CO₂R", -SO₃H, -CONR*R", -CR"O, -SO₂-NR*R", -NO₂, -SO₂-R", -SO-R*, -CN, alkoxy, -OH, -SH, alkylthio, -NR"-CO₂-R", -NR"-CO-R*, -NR"-SO₂-R", -O-CO-R*, -O-CO₂-R*, -O-CO-NR*R", cycloalkyl, alkylamino, hydroxyalkylamino, aryl, or heteroaryl;

R⁹ is independently H, halogen, haloalkyl, haloalkyloxy or alkyl;

R* is independently H, alkyl, cycloalkyl, aminoalkyl, alkoxy, -OH, -SH, alkylthio, hydroxyalkyl, haloalkyl, haloalkyloxy, aryl or heteroaryl;

R` is independently H, -CO₂R``, -CONHR``, CR``O, -SO₂NR``, -NR``-CO-haloalkyl, -NO₂, NR``-SO₂-haloalkyl, -NR``-SO₂-alkyl, -SO₂-alkyl, -NR``-CO-alkyl, -CN, alkyl, aminoalkyl, alkylamino, alkoxy, -OH, -SH, alkylthio, hydroxyalkyl, hydroxyalkylamino, halogen, haloalkyl, haloalkyloxy, aryl, arylalkyl or heteroaryl;

R`` is independently hydrogen, haloalkyl, hydroxyalkyl, alkyl, cycloalkyl, aryl, heteroaryl or aminoalkyl;

 R^2 is H, OR^6 , or NHR^7 ;

R³ is H, alkyl, cycloalkyl, aryl, arylalkyl, alkoxy, O-aryl, O-cycloalkyl, halogen, aminoalkyl, alkylamino, hydroxylamino, hydroxylalkyl, haloalkyl, haloalkyloxy, heteroaryl, alkylthio, S-aryl, or S-cycloalkyl;

R⁴ is H, alkyl, cycloalkyl, aryl, or heteroaryl;

R⁵ is H, OH, alkoxy, O-aryl, alkyl, or aryl;

R⁶ is H, alkyl, cycloalkyl, aryl, heteroaryl, arylalkyl, alkylaryl, alkoxyalkyl, acylmethyl, (acyloxy)alkyl, non-symmetrical (acyloxy)alkyldiester, or dialkylphosphate;

R⁷ is H, alkyl, aryl, alkoxy, O-aryl, cycloalkyl, or O-cycloalkyl;

R⁸ is hydrogen or alkyl;

E is an alkyl or cycloalkyl group which is substituted by $[D_m-(CHR_3)_n]_qY$ or a monocyclic or polycyclic substituted or unsubstituted ring system which may contain one or more groups X and which contains at least one aromatic ring;

Y is hydrogen, halogen, haloalkyl, haloalkyloxy, alkyl, cycloalkyl, a monocyclic or polycyclic substituted or unsubstituted ring system which may contain one or more groups

X and which contains at least one aromatic ring or

Application No. 10/736,711 Reply to Office Action of October 24, 2005

$$R^1$$
 R^8
 R^2
 R^2

- m is 0 or 1;
- n is 0 or 1;
- p is 0 or 1;
- r is 0 or 1;
- q is 0 or 1;
- t is 1 to 3; and
- v is 0 to 3.

Claim 2 (Currently Amended): A compound of the general formula (Ia) or a salt or a physiologically function derivative thereof,

$$(R^{1})_{t}$$

$$R^{8}$$

$$(R^{9})_{v}$$

$$R^{2}$$

$$R^{2}$$

$$(Ia)$$

wherein

A is a <u>non-heterocyclic</u> non-aromatic ring system containing 4, 5, 6, 7 or 8 carbon atoms, wherein the ring system comprises at least one double bond and wherein one

or more of the carbon atoms in the ring represented by X may be carbonyl (C=O) can be replaced by a group X, wherein X is CO;

D is O, S, SO₂, NR⁴, or CH₂;

Z¹ and Z² are, independently, O, S, or NR⁵;

R¹ is independently H, halogen, haloalkyl, haloalkyloxy -CO₂R``, -SO₃H, -OH, -CONR*R``, -CR``O, -SO₂-NR*R``, -NO₂, -SO₂-R``, -SO-R*, -CN, alkoxy, alkylthio, aryl, -NR``-CO₂-R`, -NR``-CO-R*, -NR``-SO₂-R`, -O-CO-R*, -O-CO₂-R*, -O-CO-NR*R``; cycloalkyl, alkylamino, hydroxyalkylamino, - SH, heteroaryl, or alkyl;

R* is independently H, alkyl, cycloalkyl, aminoalkyl, alkoxy, -OH, -SH, alkylthio, hydroxyalkyl, haloalkyl, haloalkyloxy, aryl or heteroaryl;

R` is independently H, -CO₂R``, -CONHR``, CR``O, -SO₂NR``, -NR``-CO-haloalkyl, -NO₂, NR``-SO₂-haloalkyl, -NR``-SO₂-alkyl, -SO₂-alkyl, -NR``-CO-alkyl, -CN, alkyl, aminoalkyl, alkylamino, alkoxy, -OH, -SH, alkylthio, hydroxyalkyl, hydroxyalkylamino, halogen, haloalkyl, haloalkyloxy, aryl, arylalkyl or heteroaryl;

R`` is independently hydrogen, haloalkyl, hydroxyalkyl, alkyl, cycloalkyl, aryl, heteroaryl or aminoalkyl;

R² is NHOH or R² together with the nitrogen atom which is attached to R⁸ form a 5 or 6 membered heterocyclic ring with the proviso that R² is -[CH₂], and R⁸ is absent;

R³ is H, alkyl, cycloalkyl, aryl, alkoxy, O-aryl; O-cycloalkyl, halogen; aminoalkyl, alkylamino, hydroxylamino, hydroxylalkyl, haloalkyloxy, heteroaryl, alkylthio, S-aryl; S-cycloalkyl, arylalkyl, or haloalkyl;

R⁴ is H, alkyl, cycloalkyl, aryl or heteroaryl;

R⁵ is H, OH, alkoxy, O-aryl, alkyl or aryl;

R⁸ is hydrogen, or alkyl;

E is an alkyl or cycloalkyl group which is substituted by $[D_m-(CHR_3)_n]_q$ Yor a monocyclic or polycyclic substituted or unsubstituted ring system which may contain one or more groups X and which contains at least one aromatic ring;

Y is hydrogen, halogen, haloalkyl, haloalkyloxy, alkyl, cycloalkyl, a monocyclic or polycyclic substituted or unsubstituted ring system which may contain one or more groups

X and which contains at least one aromatic ring or

$$R^1$$
 R^8
 $(E)_p$
 R^2

m is 0 or1;

n is 0 or 1;

p is 0 or 1;

r is 0 or 1;

q is 0 or 1;

s is 0 to 2; and

t is 0 to 3;

with the proviso that the following compounds are excluded:

compounds wherein ring A is an unsubstituted carbocycle containing six carbon atoms and one double bond between the CZ^1 and CZ^2 -substituents, $Z^1=Z^2=O$, and s is 0; 1,3,5-Tribenzyl-2,4,6-trioxopyrrolo[3,4-d]imidazole, 1,3-Dibenzyl-5-(4-methoxy-benzyl)-2,4,6-trioxopyrrolo[3,4-d]imidazole, 1,3-Bis-(4methoxybenzyl)-5-benzyl-2,4,6-

trioxopyrrolo[3,4-d]imidazole, and 1,3-Tris-(4-methoxybenzyl)-2,4,6-trioxo-pyrrolo[3,4-d]imidazole.

Claim 3 (Canceled).

Claim 4 (Currently Amended): A compound of the general formula (IV) [[and salts and]] or a salt or physiologically functional derivative[[s]] thereof,

$$(R^1)_t$$
 A
 R^4
 R^2
 R^8
 (IV)

wherein

A is a <u>non-heterocyclic</u>, non-aromatic ring system containing 4, 5, 6, 7 or 8 carbon atoms, wherein the ring system comprises at least one double bond and wherein one or more of the carbon atoms in the ring <u>represented by X may be carbonyl (C=O)</u> ean be replaced by a group X, wherein X is selected from the group consisting of S, O, N, NR⁴, SO, CO and SO₂;

D is O, S, SO₂, NR⁴, or CH₂;

Z¹ and Z² are, independently, O, S, or NR⁵;

R¹ is independently H, halogen, haloalkyl, haloalkyloxy -CO₂R'', -SO₃H, -OH, -CONR*R'', -CR''O, -SO₂-NR*R'', -NO₂, -SO₂-R'', -SO-R*, -CN, alkoxy, alkylthio, aryl, -NR''-CO₂-R', -NR''-SO₂-R', -O-CO₂-R*, -O-CO₃-R*, -O-CO₄-R*, -O-CO₅-R*, -O-CO₆-R*, -O-CO

Application No. 10/736,711
Reply to Office Action of October 24, 2005

R* is independently H, alkyl, cycloalkyl, aminoalkyl, alkoxy, -OH, -SH, alkylthio, hydroxyalkyl, haloalkyl, haloalkyloxy, aryl or heteroaryl;

R' is independently H, -CO₂R'', -CONHR'', CR''O, -SO₂NR'', -NR''-CO-haloalkyl, -NO₂, NR''-SO₂-haloalkyl, -NR''-SO₂-alkyl, -SO₂-alkyl, -NR''-CO-alkyl, -CN, alkyl, aminoalkyl, alkylamino, alkoxy, -OH, -SH, alkylthio, hydroxyalkyl, hydroxyalkylamino, halogen, haloalkyl, haloalkyloxy, aryl, arylalkyl or heteroaryl;

R`` is independently hydrogen, haloalkyl, hydroxyalkyl, alkyl, cycloalkyl, aryl, heteroaryl or aminoalkyl;

 R^2 is H or OR^6 , NHR^7 , NR^7OR^7 or R^2 together with the nitrogen atom which is attached to R^8 form a 6 membered heterocyclic ring with the proviso that R^2 is -[CH₂]₈ and R^8 is absent;

R³ is H, alkyl, cycloalkyl, aryl, alkoxy, O-aryl; O-cycloalkyl, halogen, aminoalkyl, alkylamino, hydroxylamino, hydroxylalkyl, haloalkyloxy, heteroaryl, alkylthio, S-aryl; S-cycloalkyl, arylalkyl, or haloalkyl;

R⁴ [[,]] is H, alkyl, cycloalkyl, aryl or heteroaryl;

R⁵ is H, OH, alkoxy, O-aryl, alkyl or aryl;

R⁶ is H, alkyl, cycloalkyl, aryl, arylalkyl, heteroaryl, alkylaryl, alkoxyalkyl, acylmethyl, (acyloxy)alkyl, non-symmetrical (acyloxy)alkyldiester, or dialkylphosphate;

R⁷ is H, OH, alkyl, aryl, alkoxy, O-aryl, cycloalkyl, or O-cycloalkyl;

R⁸ is hydrogen, or alkyl;

E is an alkyl or cycloalkyl group which is substituted by $[D_m-(CHR_3)_n]_qY$ or a monocyclic or polycyclic substituted or unsubstituted ring system which may contain one or more groups X and which contains at least one aromatic ring;

Application No. 10/736,711 Reply to Office Action of October 24, 2005

Y is hydrogen, halogen, haloalkyl, haloalkyloxy, alkyl, cycloalkyl, a monocyclic or polycyclic substituted or unsubstituted ring system which may contain one or more groups X and which contains at least one aromatic ring or

$$R^{1}$$
 R^{8}
 R^{2}
 R^{2}

m is 0 or 1;

n is 0 or 1;

p is 0 or 1;

q is 0 or 1;

s is 0 to 2; and

t is 0 to 3;

with the proviso that the following compounds are excluded: 5,5-Dimethyl-4-phenyl-2-(3-phenyl-ureido)-4,5-dihydro-furan-3-carboxylic acid methyl ester, 2[3-(4-Chlorophenyl-ureido)]-5,5-dimethyl-4-phenyl-4,5-dihydro-ftiran-3-carboxylic acid methyl ester, 2[3-(4-Methoxylphenyl-ureido)]-5,5-dimethyl-4-phenyl-4,5-dihydro-furan-3-carboxylic acid methyl ester, 2[3-(4-Methylphenyl-ureido)]-5,5-dimethyl-4-phenyl-4,5-dihydro-fume-3-carboxylic acid methyl ester, 2[3-(4-Nitrophenyl-ureido)]-5,5-dimethyl-4-phenyl-4,5-dihydro-furan-3-carboxylic acid methyl ester, 4-(4-Chlorophenyl)-5,5-dimethyl-2-(3-phenyl-ureido)-4,5-dihydro-furan-3-carboxylic acid methyl ester, 4-(4-Chlorophenyl)-2[3-(4-chlorophenyl-ureido)]-5,5-dimethyl-4,5-dihydro-furan-3-carboxylic-acid methyl ester, 4-(4-Chlorophenyl)-2[3-(4-chlorophenyl)-2[3-(4-mothoxyphenyl-ureido)]-5,5-dimethyl-4,5-dihydro-furan-3-carboxylic acid methyl

9

ester, 4-(4-Chlorophenyl)-2 [3-(4-methylphenyl-ureido)]-5,5-dimethyl-4,5-dihydro-furan-3-carboxylic acid methyl ester, or 4-(4-Chlorophenyl)-2[3-(4-nitrophenyl-ureido)]-5,5-dimethyl-4,5-dihydro-furan-3-carboxylic acid methyl ester.

Claim 5 (Previously Presented): A pharmaceutical composition comprising: the compound of claim 1; and a pharmaceutically acceptable diluent or carrier.

Claim 6 (Previously Presented): A pharmaceutical composition comprising: the compound of Claim 2, and a pharmaceutically acceptable diluent or carrier.

Claims 7-18 (Cancelled)

Claim 19 (Currently Amended): A method for treating a disease associated with the expression of <u>dihydroorotate dehydrogenase</u> ("DHODH") comprising administering an amount of the compound of Claim 1 effective to inhibit the activity of DHODH to a subject in need thereof.

Claim 20 (Previously Presented): A method for treating a disease associated with the expression of DHODH comprising administering an amount of the compound of Claim 2 effective to inhibit the activity of DHODH to a subject in need thereof.

Claim 21 (Previously Presented): The method of Claim 19, wherein the disease is selected from the group consisting of rheumatism, an acute immunological disorder, an

autoimmune disease, a disease caused by malignant cell proliferation, an inflammatory disease, a disease that is caused by a protozoal infestation, a disease that is caused by a viral infection, *Pneumocystis carinii*, fibrosis, uveitis, rhinitis, asthma and athropathy.

Claim 22 (Previously Presented): The method of Claim 19, comprising administering a compound of the general formula (I) or a salt thereof.

Claim 23 (Previously Presented): The compound of Claim 1, which is compound of the general formula (I) in free form.

Claim 24 (Previously Presented): The compound of Claim 1, which is a salt of a compound of general formula (I).

Claim 25 (Previously Presented): The compound of Claim 1, which is a physiologically functional derivative of a compound of general formula (I).

Claim 26 (Previously Presented): The compound of Claim 1, wherein ring A contains five carbon atoms.

Claim 27 (Previously Presented): The compound of Claim 1, wherein ring A contains a single double bond between the carbon atoms carrying substituents Cz^1 and Cz^2 .

Claim 28 (Currently Amended): The compound of Claim 1, wherein ring A contains a single X group which is <u>carbonyl (C=O)</u> [[CO]].

Application No. 10/736,711

Reply to Office Action of October 24, 2005

Claim 29 (Currently Amended): The compound of Claim 1, wherein none of the carbon atoms is replaced by X, which is carbonyl.

Claim 30 (Previously Presented): The compound of Claim 1, wherein R¹ is OH, OCH₃, SH, CO₂H, SO₃H or tetrazole.

Claim 31 (Previously Presented): The compound of Claim 1, wherein R⁹ is H.

Claim 32 (Previously Presented): The compound of Claim 1, wherein \mathbb{R}^2 is OH or \mathbb{C}^6 .

Claim 33 (Previously Presented): The compound of Claim 1, wherein R^8 is H or methyl.

Claim 34 (Previously Presented): The compound of Claim 1, wherein Y is optionally substituted phenyl.

Claim 35 (Previously Presented): The compound of Claim 1, wherein D is S or O and m = 1.

Claim 36 (Previously Presented): The compound of Claim 1, wherein z^1 and z^2 are both O.